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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,407	12/05/2003	David Wadlow	3020	9757

7590 09/23/2004

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EXAMINER

MULLEN, THOMAS J

ART UNIT	PAPER NUMBER
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2632

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/728,407

Applicant(s)

WADLOW ET AL.

Examiner

Thomas J. Mullen, Jr.

Art Unit

2632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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1. The patent number (6731209) associated with parent application 10/062,866 should be inserted on page 1 of the specification in the appropriate place; also, the related provisional application 60/267,113 should be mentioned in the same paragraph.
2. The abstract of the disclosure is objected to because of the use of "legal phraseology" (note four occurrences of "said", last 7 lines); also, on line 13, it appears that "oscillation" should be --oscillator--. Correction is required. See MPEP § 608.01(b).
3. The disclosure is objected to because of the following informalities:
in the paragraph which was added after the last line of page 17 (in the preliminary amendment), where the term " ω_n " is defined at the end of the paragraph, there appears to be a formula or equation intended at that point but no such formula or equation is present;
in the replacement paragraph (in the preliminary amendment) beginning at page 20, line 21 of the specification, at line 24 of the replacement paragraph, where "preset" was deleted it appears that the comma following "preset" should likewise be deleted; and,
at page 28, line 30, "by" should be --be--.
Appropriate correction is required.
4. Claims 15-24 are objected to under 37 CFR 1.75(a) for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
Claim 15, line 11, it appears that "electrodes" should be --electrode-- (note the corresponding changes on lines 5, 9, 13, etc).
Claim 15, line 17, "the phase/frequency comparator" lacks antecedent basis.
Claim 16, line 14, between "phase" and "frequency" should be a slash ("/")--note the corresponding recitation in claims 2, 5 and 15, as well as line 17 of claim 16.
Claim 16, line 16, before "phase" should be inserted --a--.
Claim 17, line 3, it appears that "electrodes" should be --electrode-- (note the corresponding change on line 4).
5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There appears to be no description in the disclosure of one or more embodiments of applicant's invention using only a single "sense electrode", as recited in claims 1, 5, 15 and 16 as amended. The original disclosure teaches that "at least two sense electrodes" are used to "establish...an electrical field between the sense electrodes", such that the system of the invention responds to "motion of (a) proximate object within the field" (specification p. 7, lines 6-12). In particular, with the system of the invention, "a person's hand is always detected by the sensor as a dielectric material" (p. 21, lines 26-27), which would seem to imply that two sense electrodes are required in order to define the electrical field of the capacitor. This is in contrast to the prior art process (see the background discussion at p. 3, lines 18-27) of detecting an object as a conductive, grounded material which could "effectively form (a) second electrode" in a parallel plate-type sensor. Further, it is taught that applicant's sensor is of the "fringing field" type (p. 23, lines 17-21), which is discussed in the background section as requiring two sense electrodes (p. 4, lines 1-5). Nowhere in the Summary or Detailed Description (i.e. the specification starting at p. 5, line 1), or the Abstract, does there appear to be any mention of an embodiment of applicant's invention using only a single sense electrode.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claims 11-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11, it is unclear what is meant by an electrode (i.e., a singular element as recited in claim 11) being "disposed in a planar relationship", i.e., it is unclear what other element(s) this singular element has such a "relationship" with.

9. Claims 1-24 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112 set forth in this Office action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


The art cited in the parent application is made of record. Barger et al (US 6526839) is cited to further show the state of the art.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Mullen, Jr. whose telephone number is 571-272-2965. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu, can be reached on (571) 272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

TJM


Thomas J. Mullen, Jr.
Primary Examiner
Art Unit 2632